

CLAIMS

1. A method of providing a location specific service in a digital cellular communication network using unstructured supplementary service data, wherein said service data is sent to a network node of said network by at least one mobile station, said service being dependent of location information of said at least one mobile station, wherein said method comprises a step of including location information in said service data by said network node.
2. A method according to claim 1, wherein said network node forwards said service data to a storage unit.
3. A method according to claim 2, wherein said storage unit is a Home Location Register.
4. A method according to claim 2, wherein said storage unit is associated with an external service node.
5. A method according to any one of the preceding claims, wherein said network node further includes a Reference Number in said service data.
6. A method according to claim 5, as dependent on any of the claims 2, 3, 4 or 5 wherein the reference number is used to correlate a service data call detail record of said service data forwarded by said network node, with a service call detail record of said service provided.
7. A method according to any of the previous claims, wherein said location information is used for location-dependent charging.
8. A method according to any of the previous claims, wherein said location information is used for time-dependent charging.
9. A method according to claim 8, as dependent on any of the claims 2, 3 or 4, wherein said storage unit keeps a register of location identifiers, such as cell identifiers or service area identifiers, mapped on geographical time zone data, and a correction factor applicable for any cell that resides in a time zone different from the time zone of said

network node.

10. A method according to any of the previous claims, wherein said network node is a mobile services switching centre.

5 11. A network node for a telecommunications network comprising an input unit for receiving unstructured supplementary service data from at least one mobile station, a processing unit for processing said service data, and means for maintaining location information of said at least one mobile station, wherein said processing unit is arranged for including said location information of said at least one mobile station
10 in said service data.

12. A network node according to claim 11, wherein said network node further comprises means for generating a reference number associated with said service data, wherein said processing unit is arranged for including said reference number in said service data.

15 13. A network node according to claim 11 or 12, further comprising an output unit for forwarding said service data to a storage unit.

14. A network node according to claim 13, wherein said storage unit is a Home Location Register.

20 15. A network node according to claim 13, wherein said storage unit is associated with an external service node.

16. A network node according to any one of the claims 11 to 15, wherein said network node is a mobile services switching centre.